<u>Abstract</u>

The invention relates to a method and an apparatus for drying or heat-treating substances or products at a pressure other than atmospheric pressure. The invention relates furthermore to banana chips dried by means of this method and banana powder produced therefrom. For drying or heat-treating, the products to be treated are loaded in transport receptacles which are subsequently charged via charging lock chambers into a treatment chamber and discharged therefrom via discharging lock chambers. For drying or heat treating, at least one microwave source is provided in the treatment chamber. After heat-treating or drying, a resting period may be scheduled. More particularly for this purpose, a vertically-oriented conveying system is provided in the treatment chamber when a longish resting period is involved. The transport receptacle is configured dished and my comprise nets on which the products are applied. The method is employed preferably for drying or heat-treating basic food material, e.g. for food products or medicinal drugs.